

U.S. Patent Application No. 10/776,970
Amendment dated April 28, 2006
Response to Final Office Action dated January 31, 2006

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-13 (Canceled)

Claim 14 (Previously presented): A reagent set for detecting a cholesterol in a high-density lipoprotein, comprising a first reagent and a second reagent, wherein said first reagent comprises an ion strength increasing compound and a nonionic surfactant that has an HLB value of 16 or more, and said second reagent comprises a first enzyme that reacts the cholesterol in the high-density lipoprotein and a second enzyme comprising cholesterol dehydrogenase or cholesterol oxidase, or both.

Claim 15 (Previously presented): The reagent set of claim 14, wherein the ion strength increasing compound is hydrazine, hydrazine salt, hydrazine hydrate, hydrazine solvate, NaCl, urea, guanidine, or semicarbazide.

Claim 16 (Previously presented): The reagent set of claim 14, wherein the ion strength increasing compound is hydrazine.

Claim 17 (Previously presented): The reagent set of claim 16, wherein the first reagent comprises the hydrazine at a concentration of 30mM or more.

Claim 18 (Previously presented): The reagent set of claim 14, wherein the nonionic surfactant has a HLB value of 17 or more.

Claim 19 (Previously presented): The reagent set of claim 14, wherein the first enzyme is lipoprotein lipase or cholesterol esterase.

Claim 20 (Canceled)

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Claim 21 (Previously presented): The reagent set of claim 14, wherein the second enzyme is cholesterol dehydrogenase, and

the first reagent comprises β -nicotinamide adenine dinucleotide of an oxide type, thionicotinamide adenine dinucleotide of an oxide type, β -nicotinamide adenine dinucleotide phosphate of an oxide type or thionicotinamide adenine dinucleotide phosphate of an oxide type, or combinations thereof.

Claim 22 (Previously presented): A reagent set for detecting a cholesterol in a low-density lipoprotein, comprising a first reagent and a second reagent, wherein said first reagent comprises an ion strength increasing compound, a first nonionic surfactant which has an HLB value of 16 or more, a first enzyme reacting a cholesterol in a high-density lipoprotein and a second enzyme selected from cholesterol dehydrogenase or cholesterol oxidase, or both and the second reagent comprising a second nonionic surfactant which has an HLB value of 11 to 13.

Claim 23 (Previously presented): The reagent set of claim 22 wherein the second reagent comprises a third enzyme that reacts the cholesterol in the low-density lipoprotein.

Claim 24 (Previously presented): The reagent set of claim 23, wherein the third enzyme is lipoprotein lipase or cholesterol esterase.

Claim 25 (Canceled)

Claim 26 (Previously presented): The reagent set of claim 22, wherein the second nonionic surfactant has a HLB value of 11 to 13.

Claim 27 (Previously presented): The reagent set of claim 22, wherein the ion strength increasing compound is hydrazine, hydrazine salt, hydrazine hydrate, hydrazine solvate, NaCl, urea, guanidine, or semicarbazide, or combinations thereof.

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Claim 28 (Previously presented): The reagent set of claim 22, wherein the ion strength increasing compound is hydrazine.

Claim 29 (Previously presented): The reagent set of claim 28, wherein the first reagent comprises the hydrazine at a concentration of 30mM or more.

Claim 30 (Previously presented): The reagent set of claim 22, wherein the first nonionic surfactant has a HLB value of 17 or more.

Claim 31 (Previously presented): The reagent set of claim 22, wherein the first enzyme is lipoprotein lipase or cholesterol esterase, or both.

Claim 32 (Canceled)

Claim 33 (Previously presented): The reagent set of claim 22, wherein the second enzyme is cholesterol dehydrogenase, and

the first reagent comprises β -nicotinamide adenine dinucleotide of an oxide type, thionicotinamide adenine dinucleotide of an oxide type, β -nicotinamide adenine dinucleotide phosphate of an oxide type, or thionicotinamide adenine dinucleotide phosphate of an oxide type, or combinations thereof.

Claim 34 (Previously presented): A method of assaying cholesterol, comprising:

providing the reagent set of claim 14; and

utilizing the reagent set to assay a high-density lipoprotein fraction of a sample from a patient, wherein utilizing the reagent set to assay a high-density lipoprotein fraction comprises introducing the first reagent to the sample, introducing the second reagent to the sample and quantitating cholesterol generated by action of the first reagent and second reagent on the sample.

Claim 35 (Previously presented): A method of assaying cholesterol in a low density lipoprotein fraction of a sample, comprising:

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providing the reagent set of claim 22; and

utilizing the reagent set to assay a low density lipoprotein fraction of a patient, wherein utilizing the reagent set to assay a low-density lipoprotein fraction comprises introducing the first reagent to the sample, introducing the second reagent to the sample and quantitating cholesterol generated by action of the first reagent and second reagent on the sample.

Claim 36 (New): Reagents for detecting a cholesterol in a high-density lipoprotein, comprising a first reagent and a second reagent, wherein said first reagent comprises an ion strength increasing compound and a nonionic surfactant that has an HLB value of 16 or more, and said second reagent comprises a first enzyme that reacts the cholesterol in the high-density lipoprotein and a second enzyme comprising at least one of cholesterol dehydrogenase and cholesterol oxidase.